

## **GLOBAL CLIMATE CHANGE**

## SEPTEMBER 2003



USAID's extensive activities in Paraguay have not only succeeded in increasing public participation in the process of environmental awareness but have also significantly helped mitigate the effects of climate change. Through USAID's support for the conservation of natural resources and management of protected areas, crucial carbon stocks have been preserved, as has important biodiversity.

Background. Agriculture dominates the economy of this landlocked South American country. Due to the importance of land and natural resources, one of the main environmental initiatives in Paraguay is to improve the management of the globally important ecoregions of the Interior Atlantic Forest (IAF), Pantanal, and Chaco. To date, conservation efforts in Paraguay have been somewhat restricted to domestic efforts only. However, increased integration with the efforts of neighboring countries has become more important with Paraguay's participation in the Southern Cone Common Market (Mercosur) and growing regional integration. USAID/Paraguay's environmental activities address conservation of globally significant ecoregions through integrated efforts in Argentina, Bolivia, and Brazil, and in collaboration with Paraguayan nongovernmental organizations (NGOs), civil society organizations, and municipal and departmental governments.

Addressing environmental concerns also complements and strengthens the movement to build democracy in Paraguay. Continued environmental destruction, accompanied by associated socioeconomic impacts, can destabilize Paraguay's still fragile democracy. The depletion of Paraguay's rich endowment of natural resources severely threatens economic growth. Timber reserves have been exhausted and the once rich topsoil of the eastern border region (largely uncultivated until the 1970s) is now considered to be severely eroded.

USAID/Paraguay believes that a vibrant civil society, actively participating within a functioning democracy, is critical to successfully addressing these environmental concerns through effective advocacy and participation in creating and implementing national environmental policies. Accordingly, initiatives aimed at strengthening civil society organizations and local government are key components of the Mission's democracy objective and are complemented in its environmental programming.

**Sector-Specific Climate Change Activities.** USAID's environmental activities in Paraguay focus primarily on forest conservation and protected areas management.

Protection of Critical Habitats That Promote Conservation of Carbon Stocks. Improved land use, forestry activities, and natural resources management in Paraguay have helped to preserve the vast forests that act as a carbon sink, thereby mitigating the effects of climate change. For example, the protection capacity of Defensores del Chaco National Park is being

## **USAID's** partners in climate change activities in Paraguay include\*:

- Altervida
- Foundation for the Sustainable Development of the South American Chaco (DeSdelChaco)
- · Fundacion Moises Bertoni
- Procosara
- Guyra Paraguay
- International Institute for Democracy and Electoral Assistance (IDEA)
- Natural Land Trust
- The Nature Conservancy (TNC)
- World Wildlife Fund (WWF)
- \* Because partners change as new activities arise, this list of partners is not comprehensive.

strengthened through the improvement of physical infrastructure, the training of park guards, and the development of a long-term management plan with the local communities. USAID provides technical assistance and training to NGOs and local governments with increased emphasis on developing legislation to promote financial and structural incentives for ecological management and forest conservation in the three ecoregions.

USAID financed the development of three ecoregional management plans for the interior Atlantic rain forest, the Chaco dry forest, and the Pantanal wetlands. These plans identify core areas and corridors of primary importance for conservation. Likewise, a detailed analysis of the overall environmental policy framework revealed which legal areas need to be targeted for the future. New legal methods of protecting biological diversity were employed. Furthermore, local governments and civil society developed new information on ways to manage land usage for environmental purposes. A coalition of environmental NGOs demanded legal action against the Paraguayan Forest Service, which has been identified as one of the most corrupt government agencies. Investigators detected serious irregularities, and at least 30 public officials are being investigated for criminal acts. This NGO coalition also played an important role by providing expert witnesses to support the first successful prosecution for illegal logging. The administrator of the land illegally logged received a fine and was sentenced to jail.

In 2001, a new agrarian code replaced the previous code from 1932 and removed the obsolete concept that forested lands are idle lands subject to expropriation. This concept of idle land is responsible for much of the massive deforestation in Paraguay. The new agrarian code explicitly states that properties that have been legally declared as protected areas will no longer be subject to expropriation. The inclusion of this concept is one of the most important achievements related to developing the rural sector in a more environmentally responsible way.

Protected Area and Resource Management Plans. Through a Paraguayan presidential decree, two core areas of the interior Atlantic rain forest (102,000 hectares) have been declared resource management areas, which allows the land to remain in private hands while its use is regulated by zoning specifications. Through another presidential decree, the Capiibary Ecological Reserve has been created to protect 5,000 hectares of forest in the IAF ecoregion. Additionally, the Paraguayan government established a legal tool for the purchase of 4,629 hectares of land in the IAF ecoregion that will be managed by the Ache indigenous group to ensure the conservation and sustainable use of an area that borders the Mbaracayú Private Reserve, the most important core area of the IAF.

Significant results were also achieved through developing a long-term management plan for the Defensores del Chaco national park, the largest protected area (780,000 hectares) in Paraguay and the main core area of

the Grand Chaco Biosphere Reserve. The establishment of two private reserves, Arroyo Blanco and Morombí, with approved management plans added an additional 25,000 hectares to the National Protected Areas System. Both areas contain important remnants of interior Atlantic rain forest that function as biological corridors between other existing reserves. All three management plans were developed in a very participatory manner that encourages community oversight of these important natural resources.

Lastly, USAID/Paraguay provided technical support to the government in establishing the Grand Chaco Biosphere Reserve, which encompasses 4.7 million hectares. The reserve is located in the northernmost part of the Paraguayan Chaco and extends to the Bolivian border. It includes extremely important areas of the dry Chaco and the Pantanal wetlands. With the inclusion of the adjacent protected area in Bolivia, the reserve comprises 6 million hectares (roughly the size of South Carolina) and is the largest in the Western Hemisphere.

For more information on Paraguay, visit the USAID Web site at:

• http://www.usaid.gov